

Appl. No. 10/810,879

Reply to Office action of March 25, 2005

REMARKS

The present application describes unique user input techniques and devices that are capable of identifying a single gesture resulting from multiple user input objects (e.g. fingers) present on or near a sensing pad. Because the art cited in the Office Action dated March 24, 2005 fails to disclose these and other features of the presently-claimed inventions, Applicant hereby requests that the Office reconsider the present Application under 37 C.F.R. § 1.111.

This Response amends claims 1, 2 and 4 without prejudice or disclaimer, and adds new claims 8-10. After entry of the above claim amendments, claims 1-10 (3 independent and 7 dependent claims) are pending, and no new matter is presented by this Response.

The Office Action rejects each of the prior claims 1-7 under 35 USC § 102(e), citing US Patent No. 5,252,951 ("Tannenbaum"). The Tannenbaum reference does not particularly relate to user input devices or capacitive sensors, but rather provides a general description of a user interface for a personal computer. As a result, the cited reference clearly fails to disclose each and every element of the inventions described by the present claims. More particularly, the reference does not disclose at least the "capacitance profile" or the "input object" aspects of independent claims 1, 4 and 10.

With respect to the first aspect, each of the present claims effectively recite a "capacitance profile" that identifies the presence of at least two user input objects on or in proximity to the capacitive sensor. Because Tannenbaum is not concerned with the operation of a sensor/input device, the reference fails to describe processing of electrical signals (e.g. voltages or capacitances) in any meaningful manner, and therefore contains no mention whatsoever of the "capacitance profiles". Although the Office Action cites to col. 10, lines 3-30 of the reference as disclosing a capacitance profile, it is clear that this language merely relates to "interface profiles" processed between computer programs executing on a computer system. Indeed, the "interface profiles" cited in the Office Action are clearly described as "lists of corresponding commands" (i.e. computer program names, operating system instructions, or macros). These "profiles", then, do not relate to any sort of "capacitance" or other electrical signal at all. As a result, the "interface profiles" mentioned in the Tannenbaum reference do not disclose the "capacitance profiles" recited in the present claims.

Appl. No. 10/810,879

Reply to Office action of March 25, 2005

Moreover, the Tannenbaum reference fails to describe "at least two input objects" as this term is used in the present claims. The present claims each effectively recite that at least two input objects on or in proximity to the sensing matrix are used to indicate a single gesture. The term "input object" of the present claims therefore relates to a finger, stylus or other tangible item used to provide user inputs to the sensor/input device. The "objects" described by the Tannenbaum reference, in contrast, are logical constructs representing computer programs or windows executing within a user interface. (See, e.g., Tannenbaum at col. 18, lines 17-24). As a result, Applicant's claims are clearly differentiable from the Tannenbaum disclosure. To make this distinction even more apparent, Applicant has amended the claims to clarify that the "objects" are "input objects" provided "on" or "in proximity to" the touch sensor/matrix.

In view of the above remarks, each of the pending claims are believed to be allowable over the prior art of record. Applicant therefore respectfully requests reconsideration of the rejections and allowance of all pending claims. Should the Examiner have any questions or wish to further discuss this application, Applicant's counsel may be reached at (480) 385-5060 or bcarlson@ifllaw.com.

Although no additional fees or extensions of time are believed to be required for entry of this Response, the Commissioner is authorized and requested to provide any extension and/or to debit any fees that may be required to avoid abandonment of this Application from Deposit Account No. 50-2091.

Respectfully submitted on behalf of
SYNAPTICS INCORPORATED, ASSIGNEE

Dated: 6/22/2005By: 

Brett A. Carlson

U.S. Registration No. 39,928

INGRASSIA FISHER & LORENZ, P.C.
Customer No. 29906